## CLAIMS

- A composition used for preparation of a color development system, comprising a component (a) comprising at least one urea-urethane compound having one or more urea groups and one or more urethane groups in the same molecule, the component (a) being dispersed in a liquid medium and subjected to heat treatment.
- 2. The composition according to Claim 1, wherein the component (a) urea-urethane compound is at least one compound represented by any of the following formulas (I) to (VI):

wherein each of X, Y, and Z represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue; and each residue may have a substituent;

$$X-0-C-N-X-C-N-C-N-C-O-X$$
(11)

wherein each of X and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue; and each residue may have a substituent;

$$\left(\begin{array}{cccc} X - O - \stackrel{\bigcirc{}^{\circ}}{C} - N - Y - N - \stackrel{\bigcirc{}^{\circ}}{C} - N - \\ H & H & H \end{array}\right)_{n} \alpha \qquad (1111)$$

wherein each of X and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue,  $\alpha$  represents a residue having a valence of 2 or greater, n represents an integer of 2 or greater, and each residue may have a substituent;

$$\left(Z-N-C-N-A-C-O-\right)^{O}_{D}$$

wherein each of Z and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue,  $\beta$  represents a residue having a valence of 2 or greater, n represents an integer of 2 or greater, and each residue may have a substituent;

wherein a hydrogen atom on a benzene ring may be substituted with an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, each residue may have a substituent,  $\gamma$ 

represents  $-SO_2-$ , -O-,  $-(S)_n-$ ,  $-(CH_2)_n-$ , -CO-, -CONH-, any of the following formula (a), or a direct bond, and n is 1 or 2; and

wherein a hydrogen atom on a benzene ring may be substituted with an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, each residue may have a substituent,  $\delta$  represents any of -SO<sub>2</sub>-, -O-, -(S)<sub>n</sub>-, -(CH<sub>2</sub>)<sub>n</sub>-, -CO-, -CONH-, -NH-, -CH(COOR<sub>1</sub>)-, -C(CF<sub>3</sub>)<sub>2</sub>-, -CR<sub>2</sub>R<sub>3</sub>- or a direct bond; R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> represent an alkyl group having 1 to 20 carbon atoms, and n is 1 or 2).

- 3. The composition according to Claim 1 or 2, comprising a dispersion obtained by dispersing the component (a) urea-urethane compound in a liquid medium and heating the mixture at 40°C or more.
- 4. A composition used for preparation of a color development system comprising a dispersion in which a component (a) comprising at least one urea-urethane compound having one or more urea groups and one or more urethane groups in the same molecule, and a coloring inhibitor component (b), which is at least one compound selected from a silicate, a carbonate, a sulfate, a phosphate, a metal oxide, a metal hydroxide, a hindered phenol compound, a hindered amine compound, and an acetoacetic acid derivative are dispersed in a liquid medium.
- 5. The composition according to Claim 4, which is obtained by subjecting at least one of the component (a) and the component (b) to heat treatment.
- 6. The composition according to Claim 4, wherein the component (a) urea-urethane compound is at least one compound represented by the following formulas (I) to (VI):

wherein each of X, Y, and Z represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, and each residue may

have a substituent;

wherein each of X and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, and each residue may have a substituent;

wherein each of X and Y represents an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue,  $\alpha$  represents a residue having a valence of 2 or greater, n represents an integer of 2 or greater, and each residue may have a substituent;

$$\left(Z-N-C-N-Y-N-C-O-\right)_{n} \beta \qquad (1 \text{ V})$$

wherein Z and Y represent an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue,  $\beta$  represents a residue having a valence of 2 or greater, n represents an integer of 2 or greater, and each residue may have a substituent;

wherein a hydrogen atom on a benzene ring may be substituted with an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, each residue may have a substituent,  $\gamma$  represents any of  $-SO_2-$ , -O-,  $-(S)_n-$ ,  $-(CH_2)_n-$ , -CO-, -CONH-, a compound of any of the following formulas (a), or a direct bond, and n is 1 or 2; and

wherein a hydrogen atom on a benzene ring may be substituted with an aromatic compound residue, a heterocyclic compound residue, or an aliphatic compound residue, each residue may have a substituent;  $\delta$  represents any of  $-SO_2-$ , -O-,  $-(S)_n-$ ,  $-(CH_2)_n-$ , -CO-, -CONH-, -NH-,  $-CH(COOR_1)-$ ,  $-C(CF_3)_2-$ ,  $-CR_2R_3-$  or a direct bond,  $R_1$ ,  $R_2$ , and  $R_3$  represent an alkyl group having 1 to 20 carbon atoms, and n is 1 or 2.

- 7. The composition according to any one of Claims 4 to 6, wherein the component (b) coloring inhibitor is at least one member selected from magnesium silicate, calcium silicate, magnesium carbonate, calcium carbonate, calcium sulfate, magnesium phosphate, 2,2'-methylenebis(4,6-di-t-butylphenyl)sodium phosphate, magnesium oxide, aluminum oxide, titanium oxide, magnesium hydroxide, 1,1,3-tris(2-methyl-4-hydroxy-5-cycloheylphenyl)butane, 1,1,3-tris(2-methyl-4-hydroxy-5-t-butylphenyl)butane, tris(2,6-dimethyl-4-t-butyl-3-hydroxybenzyl)isocyanurate, acetoacetic acid anilide, and acetoacetic acid m-xylidide.
- 8. The composition according to any one of Claims 1 to 7, further comprising an acidic developer component (c) which is at least one compound selected from a phenol derivative, an aromatic carboxylic acid derivative or a metal salt compound thereof, a salicylic acid derivative or a metal salt compound thereof, an N,N-diarylthiourea derivative, and a

sulfonylurea derivative.

- The composition according to Claim 8, wherein the phenol derivative of the acidic developer component (c) is at least one member selected from 2,2-bis(4-hydroxyphenyl) propane, bis(4-hydroxyphenyl) sulfone, 4-isopropyloxyphenyl-4'-hydroxyphenylsulfone, 2,4'-dihydroxydiphenylsulfone, bis(3-allyl-4-hydroxyphenyl) sulfone, and benzyl 4-hydroxybenzoate.
- 10. The composition according to any one of Claims 4 to 9, comprising a dispersion obtained by dispersing the component (a) urea-urethane compound in a liquid medium and heating the mixture at 40°C or more.
- 11. The composition according to any one of Claims 4 to 10, comprising a dispersion be obtained by dispersing the coloring inhibitor component (b) in a liquid medium and heating the mixture at 40°C or more.
- 12. The composition according to any one of Claims 4 to 11, comprising a dispersion obtained by dispersing the component (a) urea-urethane compound in a liquid medium and heating the mixture at 40°C or more, and a dispersion obtained by dispersing the coloring inhibitor component (b) in a liquid medium and heating the mixture at 40°C or more.
- 13. The composition according to any one of Claims 4 to 12, wherein the content of the coloring inhibitor component (b) is 1 part by mass or more and less than 50 parts by mass per 100 parts by mass of the urea-urethane compound component (a).

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- 14. The composition according to any one of Claims I to 13, wherein the urea-urethane compound component (a) and/or the coloring inhibitor component (b) are dispersed using at least one dispersant selected from the group consisting of a nonionic water-soluble polymer compound, an anionic water-soluble polymer compound, an anionic surfactant, a nonionic surfactant and an amphoteric surfactant.
- 15. The composition according to Claim 14, wherein the urea-urethane compound component (a) and/or the coloring inhibitor component (b) are dispersed using at least one dispersant selected from the group consisting of a nonionic or anionic water-soluble polymer compound selected from a polyvinyl alcohol derivative and a cellulose derivative, and an anionic surfactant.
- 16. The composition according to Claim 15, wherein the polyvinyl alcohol derivative is sulfonic acid-modified polyvinyl alcohol, the cellulose derivative is hydroxypropylmethyl cellulose and the anionic surfactant is at least one member selected from a metal salt of  $\beta$  naphthalenesulfonic acid formalin condensate and a polycarboxylic acid derivative surfactant.
- 17. A recording material comprising a color development layer containing a composition according to any one of Claims 1 to 16 arranged on a substrate.
- 18. The recording material according to Claim 17,

wherein the recording material is a thermal recording material.